

Datasheet for ABIN6655945
anti-KLF4 antibody (N-Term)



[Go to Product page](#)

3 Images

Overview

Quantity:	25 µL
Target:	KLF4
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KLF4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunoprecipitation (IP), Fluorescence Microscopy (FM)

Product Details

Purpose:	KLF4 Antibody
Immunogen:	Anti-KLF4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a N-Term portion of human KLF4 conjugated to Keyhole Limpet Hemocyanin (KLH).
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against human KLF4.
Purification:	This product was affinity purified from monospecific antiserum by immunoaffinity purification.
Sterility:	Sterile filtered

Target Details

Target: KLF4

Alternative Name: KLF4 ([KLF4 Products](#))

Background: Synonyms: rabbit anti-KLF4 Antibody, KLF-4 Antibody, Krueppel-like factor 4, Epithelial zinc finger protein EZF, EZF, Gut-enriched krueppel-like factor, GKLF, KLF 4

Background: KLF4 belong to the Kruppel like factors/Zinc fingers C2H2-type family. This gene encodes a protein that belongs to the Kruppel family of transcription factors. KLF4 can act both as activator and as repressor. It can bind the 5-CACCC-3 core sequence, the promoter region of its own gene, and can activate its own transcription. KLF4 regulates the expression of key transcription factors during embryonic development, playing an important role in maintaining embryonic stem cells, and in preventing their differentiation. This protein is required for normal development of the barrier function of skin postnatal, maintenance of the ocular surface, function in skeletal and kidney development, and thought to control the G1-to-S transition of the cell cycle following DNA damage by mediating the tumor suppressor gene p53. KLF4 may be associated with diseases such as Venous Hemangioma, Skin Squamous Cell Carcinoma, and pediatric lymphoma. Anti-KLF4 Antibody is useful for researchers interested in Peptide hormone metabolism, Stem Cell Differentiation Pathway Research, Wnt/Notch Pathway Research, and Cancer Research.

Gene Name: KLF4

Gene ID: 9314

NCBI Accession: [NP_001300981](#)

UniProt: [O43474](#)

Pathways: [Peptide Hormone Metabolism](#), [Stem Cell Maintenance](#)

Application Details

Application Notes: Immunoprecipitation_Dilution: User Optimized
ELISA_Dilution: 5 µg/mL
Immunohistochemistry_Dilution: 1:200
Flow_Cytometry_Dilution: User Optimized
IF_Microscopy_Dilution: 10 µg/mL
Western_Blot_Dilution: 1 µg/mL

Comment: Anti-KLF4 Antibody has been tested in Western Blot, ELISA, and Immunofluorescence. Expect a band at ~54.7 kDa in western blot using appropriate lysates. Positive control whole cell lysates NCCIT and PC3 @ 1µg/mL for WB, and PC3 with PFA at 10µg/mL in IF. Although not tested,

Application Details

this antibody is likely functional in immunohistochemistry, flow cytometry, and immunoprecipitation.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01 % (w/v) Sodium Azide

Preservative: Sodium azide

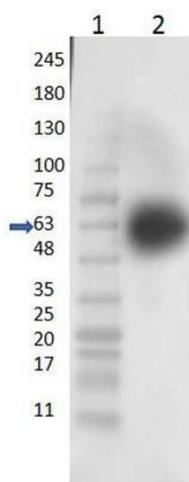
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

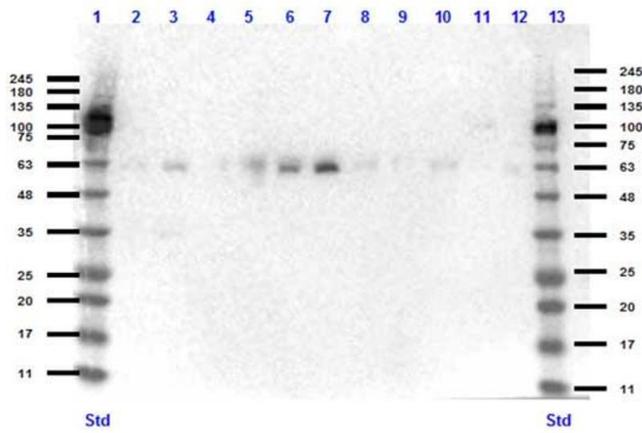
Expiry Date: 12 months

Images



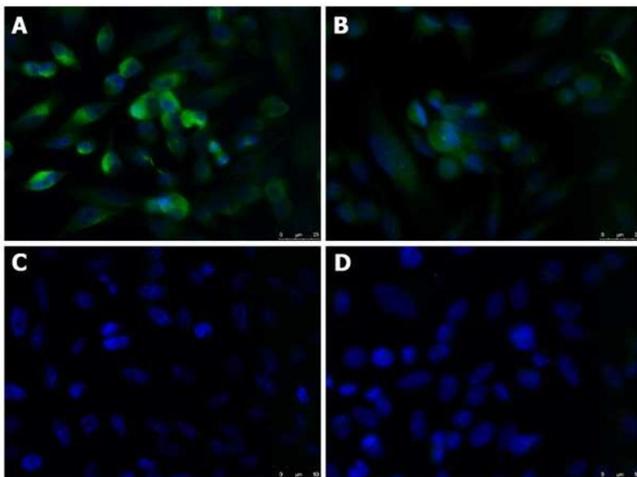
Western Blotting

Image 1. Western Blot of Rabbit Anti-KLF4 Antibody - Western Blot of Rabbit Anti-KLF4 Antibody. Lane 1: Opal Prestained Molecular Weight Ladder. Lane 2: NCCIT Whole Cell Lysate. Load: 30µg lysate. Primary Antibody: Rabbit Anti-KLF4 at 1µg/mL overnight at 4°C. Secondary Antibody: Goat Anti-Rabbit HRP Antibody at 1:10,000 at RT for 1hr. Block: BLOTTO. Predicted/Observed size: ~55 kDa for KLF4.



Western Blotting

Image 2. Western Blot of Rabbit anti-KLF4 antibody. Lane 1: MW ladder (opal pre-stained) p/n (MB-210-0500). Lane 2: U-87 WCL. Lane 3: C2C12 WCL. Lane 4: NIH/3T3 WCL. Lane 5: THP-1 WCL. Lane 6: J774A.1 WCL. Lane 7: PC-3 WCL. Lane 8: HT-29 WCL. Lane 9: Mouse colon. Lane 10: A549 WCL. Lane 11: MOLT-4 WCL. Lane 12: HeLa WCL. Lane 13: MW ladder (opal pre-stained) p/n (MB-210-0500). Load: 10 μ g per lane. Primary antibody: KLF4 antibody at 1:1000 for overnight at 4°C. Secondary antibody: rabbit secondary HRP antibody at 1:70,000 for 1 hr at RT. Block: BlockOut % BLOTTO) 30 min at RT. Predicted/Observed size: ~55 kDa for KLF4.



Immunofluorescence

Image 3. Immunofluorescence Microscopy of Rabbit anti-KLF4 antibody. Tissue: PC-3. Fixation: 0.5% PFA [A,C], 0.5% MeOH [B, D]. Antigen retrieval: not required. Primary antibody: KLF4 antibody at 10 μ g/mL for 1 h at RT. Secondary antibody: Anti-RABBIT IgG 488 Conjugated Preadsorbed at 5 μ g/ml for 1 h at RT. Localization: cytoplasmic and nuclear. Staining: Target as green fluorescent signal with DAPI (blue) nuclear counterstain.